

Installation Guide



iColor Cove QLX

CK INTELLIGENT SERIES

Preliminary

iColor[®] Cove QLX is a compact linear fixture that generates saturated color and dynamic effects in alcoves, accent areas, and other interior spaces. The fixture is available with a wide (120° x 120°) or medium (100° x 40°) beam. An integrated rotating bracket and optional mounting track provide precise positioning, and end-to-end connections ensure a simple installation.

- Integral mounting bracket with 180° rotation
- 50,000 hour lifetime
- 24 VDC input power
- End-to-end connectors
- Two standard lengths: 6-inch (15.2 cm) and 12-inch (30.5 cm)
- Uniform light quality is ensured with Optibin[®] technology
- Precise, cost-efficient digital control is provided by Chromasic[®] technology

PHILIPS

Scope Of This Guide

This Installation Guide contains important information on planning and installing your new iColor Cove QLX fixture to ensure peak performance. Read it carefully and save it for future reference. This document should never be considered a substitute for any provision of a regulation or state and/or local code.

The iColor Cove QLX product line includes, and this Installation Guide covers, these products:

iColor Cove QLX Item Numbers

| Fixture Length | Beam Angle | Item Number |
|----------------|-------------------|---------------|
| 6" (15.2 cm) | Wide 120° x 120° | I01-000066-02 |
| | Medium 100° x 40° | I01-000066-03 |
| 12" (30.5 cm) | Wide 120° x 120° | I01-000066-00 |
| | Medium 100° x 40° | I01-000066-01 |

Accessories for iColor Cove QLX Fixtures

iColor Cove QLX fixtures are part of a low-voltage system made up of the fixtures and:

- One or more compatible power supplies from the list below.
- One leader cable, to connect each power supply output port to a series of fixtures.
- A Philips, Color Kinetics, or other DMX512-based controller work with iColor Cove QLX fixtures. The number of lights that can be addressed varies with each controller. For information on Philips or Color Kinetics controllers, see <http://www.colorkinetics.com/support/systemguide/SysMatrix.pdf>.

| Power Supply | Item Number |
|---|--|
| Compatible Philips and Color Kinetics power supplies: | |
| sPDS-60ca24V provides 60W output that can be split between two ports. | I09-000021-02 DMX / Ethernet) |
| PDS-60ca provides 60W output that can be split between two ports. | I09-000016-00 (Preprogrammed) or I09-000016-01 (DMX) |
| sPDS-480ca 24V (provides eight 60W output ports) | I09-000026-00 |

| Leader Cable | Item Number |
|-------------------------------|---------------|
| 30-foot (9.1 m) leader cable. | I08-000015-00 |

Depending on the installation's design, you may need optional jumper cables to add space between fixtures. Optional mounting tracks ensure straight runs of fixtures.

| Item Description | Item Number |
|--|---------------|
| One-foot (30.5 cm) jumper cable. | I08-000020-00 |
| Five-foot (1.5 m) jumper cable. | I08-000020-01 |
| Box of 25 four-foot (1.2 m) mounting tracks for straight runs. | 523-000006-00 |

1. Start Here!

Before you begin the installation, read all of this installation guide.

iColor Cove QLX fixtures are low-voltage fixtures that require a power supply and a controller to be fully functional.

Control signals can be generated from any DMX-compatible controller, but only the power supplies listed on the previous page can transmit the control signals on the fixture's leader cable.

Owner / User Responsibilities

It is the responsibility of the contractor, installer, purchaser, owner and user to install, maintain, and operate the iColor Cove QLX fixture in such a manner as to comply with all federal, state, and local laws, codes, ordinances and regulations

WARNING

FIXTURES MUST BE INSTALLED BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH ALL NATIONAL AND LOCAL ELECTRICAL CODES AND REGULATIONS.

2. Prepare For The Installation

Planning the installation includes developing a layout plan and verifying that equipment required to support the lights is in place, as well as ensuring that all required additional components (mounting tracks, power supplies, leader and jumper cables) are available.

If approved architectural drawings are not available:

- Create a layout plan that starts with the location of the power supplies and includes all power supplies, leader cables, fixtures, and jumper cables.
- Refer to national, local, and state codes, and consult with the appropriate electrical inspector, to ensure compliance with all applicable codes and regulations.
- Consult Color Kinetics Application Engineering Services as needed at support@colorkinetics.com.

Use these guidelines when you plan the installation:

- One iColor Cove QLX leader cable is required to connect each run or series of fixtures to a power supply port.
- The number of iColor Cove QLX fixtures that may be daisy-chained together in a run is determined by the output of the power supply and its ports. Each of the compatible power supplies listed in "Accessories for iColor Cove QLX Fixtures" on page 2 provides one or more 60 Watt output ports. So, for example, a single 60 Watt port can drive up to 30 6-inch or 20 12-inch iColor Cove QLX fixtures in a single series. Or, two shorter runs can be powered by two lower wattage ports. A mix of fixture sizes may be used, so long as the total power draw is less than the 60 W supplied by the power supply port.
- Ensure that the power supplies provide the required wattage to drive the fixtures and that the number of free ports is adequate.
- The power supply and first fixture may not be separated by more than the 30-foot (9.1 m) length of the leader cable.
- Joined directly together, two fixture's connectors allow for 1" (25mm) spacing between fixtures and 180° turns.
- When fixtures need to be separated by more than an inch, use a jumper cable. Two lengths are available: one-foot (30.48 cm) (Item I08-000020-00) and five-foot (1.524 m) (Item I08-000020-01).

3. Assemble Additional Items

To wire and mount an iColor Cove QLX fixture, you may need additional parts and tools.

Power Supplies and Wiring

Install all power supplies, including any interfaces with controllers, before installing the iColor Cove QLX fixtures. One iColor Cove QLX leader cable is required to connect each run or series of fixtures to a power supply port. (The power supply and external controllers send control signals to the iColor Cove QLX fixtures over the leader cable. To configure the power supply — fixture connection, you will need the power supply installation or user guide for specific instructions.)

If jumper cables are required to add space between fixtures, make sure that they are available.

Mounting Tracks

iColor Cove QLX fixtures can be mounted directly to a wall, ceiling, cabinet or other secure surface. For straight linear applications, several iColor Cove QLX fixtures may be snapped into an optional four-foot long mounting track to ensure a straight run. If the track is specified in the plans, make sure it is available.

Tools and Supplies

You will need these tools and supplies:

- General tools to secure fixtures and mounting tracks (drill, screwdriver, level, measuring tools, etc.).
- #6 mounting screws or other hardware (bolts, nuts and washers, for instance) that is appropriate for the substrate.

4. Inspect The Fixtures and Accessories

Carefully inspect the cartons and boxes containing the iColor Cove QLX fixtures, the fixtures themselves, and all cables for any damage that may have occurred in transit.

⚠ WARNING

DO NOT USE A FIXTURE IF THE LENS, HOUSING, OR POWER CABLES ARE DAMAGED.

FIXTURES HAVE NO USER SERVICEABLE PARTS. DO NOT ATTEMPT TO OPEN THEM.

5. Install Mounting Tracks (Optional)

If the optional mounting tracks are used, install them now. Tracks can be easily cut to fit with a hacksaw or nippers. Make sure the tracks are firmly attached to the substrate with screws or other suitable connectors in all mounting holes. The screw heads may not rise above the interior rails.

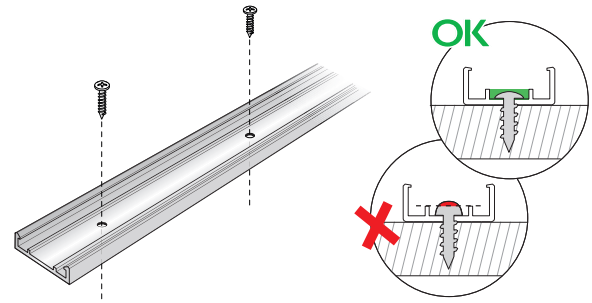


Figure 1: Mounting Track Detail

6. Install The Fixtures

(See “iColor Cove QLX Wiring” on page 4 for an overview of these steps.)

1. Position the first fixture in the series. If a track is used, snap the fixture into the track and slide it into position. The leader cable will connect to this fixture's male connector, so make sure that the fixture is installed so that the next fixture can plug into this fixture's female connector.
2. Use four screws to secure the fixture. Most materials will require pilot holes for the screws. Mark the location of the holes using the fixture base as a guide.
3. Drill the pilot holes (through the track, if used) and mount the fixture with four #6 screws.
4. Position the next fixture in the series. Match its male connector to the female connector of the previous fixture. Snap it into the track (if used) and secure the fixture with four mounting screws.
5. Continue mounting the fixtures, making direct connections or inserting jumper cables as you go, until all lights in the series are mounted and connected.
6. Insert the terminator (packaged with the leader cable) into the last fixture of the series.

7. Make Electrical Connections

1. Verify that power in the line circuit to the power supply is OFF or that the power supply's power cord is not connected.
2. Connect the leader cable to the first fixture in the run or series.
3. Connect the leader cable to the power supply.

⚠ WARNING

ENSURE THAT MAIN POWER SUPPLY IS OFF BEFORE INSTALLING OR WIRING A FIXTURE.

4. Energize the power supply's line circuit. It is normal for some fixtures not to illuminate, because communications between the power supply and fixtures has not been set up.

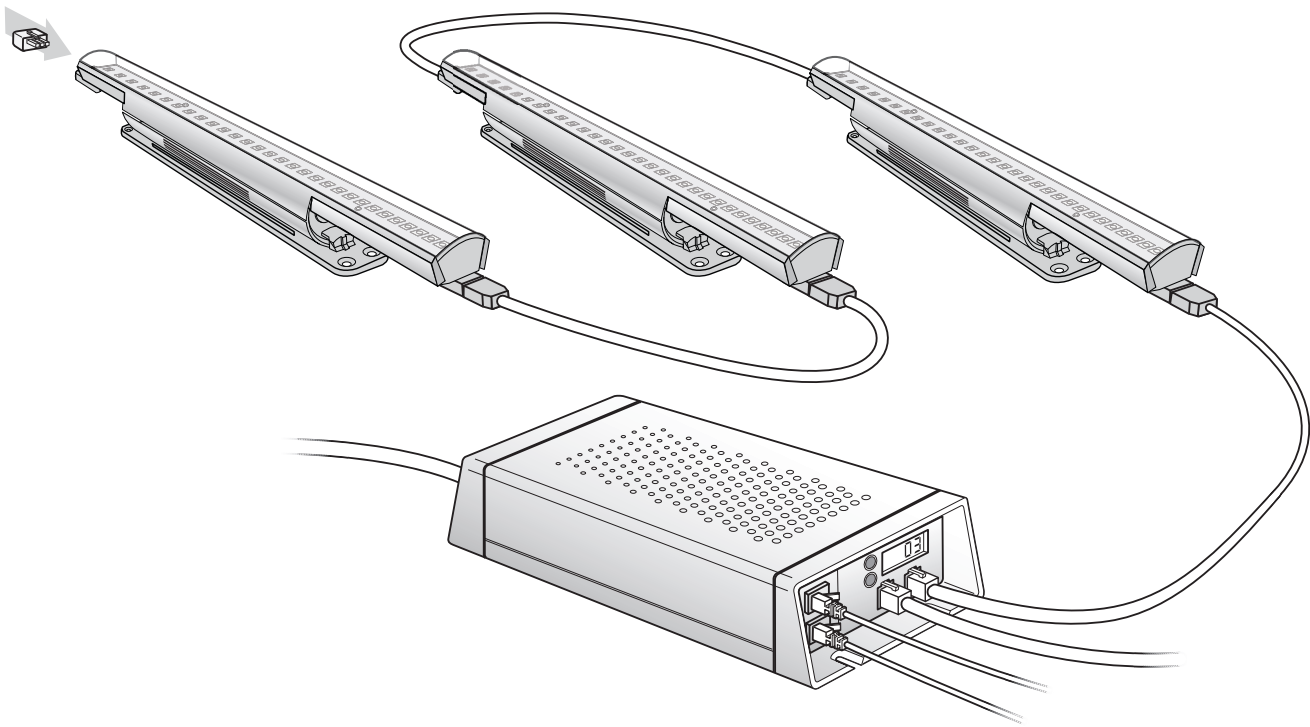


Figure 2: iColor Cove QLX Wiring This illustration shows the power supply receiving line power and control data inputs and dispatching both power and data through a lead cable to the first fixture in a run. Note the terminator location, in the last fixture of the run.

8. Address Fixtures With the Power Supply

To power up the fixtures, each one needs to be assigned a unique address by the power supply. The exact method used to address iColor Cove QLX fixtures depends on the type of power/data supply being used. Specific instructions are in each power supply's user guide, or if an external controller is used, in that tool's guide.

- For information on the PDS-60ca 24V, refer to the PDS-60ca 24V Installation Guide.
- For information on addressing, see the sPDS-60ca 24V User Guide.
- The PDS-480ca uses external software, either Light System Manager or Video System Manager, to address the fixtures.

9. Aim The Fixtures

Aim the fixtures by rotating each fixture to the correct angle. There are detents every 10 degrees in the bracket that hold it in position.

⚠ CAUTION

ICOLOR COVE QLX FIXTURES ARE A CLASS 2 LED PRODUCT. DO NOT STARE INTO A BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.

iColor Cove QLX Specifications

Specifications are subject to change without notice.

| | 6-Inch Fixture | 12-Inch Fixture |
|-----------------------|---|---|
| Length | 6 inches (15.2 cm) | 12 inches (30.5 cm) |
| Width | 1.25 inches (3.2 cm) (tube diameter) | |
| Height | 1.37 inches (3.5 cm) | |
| Weight | 3 oz. (85 g) | 5 oz. (142 g) |
| LEDs Per Fixture | 5 each: red, green, and blue | 10 each: red, green, and blue |
| Total Output (lumens) | TBD | Wide (120° x 120°) beam angle: 49.8 Medium (100° x 40°) beam angle: 46.1 |
| Efficacy (Lm/W) | TBD | White > 15 |
| Source | High-brightness LEDs. | |
| Color Range | 16.7 million (8-bit) additive RGB colors; continuously variable intensity | |
| Beam Angle | 120° x 120° or 100° x 40° | |
| Mixing Distance | Mixing distance to uniform light is 2 inches (5 cm) | |
| Housing | Charcoal gray, UL-recognized, injection-molded plastic | |
| Lens | Clear polycarbonate. V-0 flame rating. FI UV rating. | |
| Medium-Beam Optics | Polycarbonate. | |
| Environment | UL Dry; CE IP20 | |
| Fixture Connectors | IEC 15 A (max) with C13 plug | |
| Max. Fixture Run | 30 fixtures (on a single 60W power supply port) | 20 fixtures (on a single 20W power supply port) |
| Max. Cable Run Length | 30 feet (9.1 m) | |
| Listings | CE, PSE, RoHS, UL/CUL, WEEE | |
| Control | Chromatic input data | |
| Operating Voltage | 24 VDC from a Philips or Color Kinetics DMX In / Chromasic Out power supply | |
| Power Consumption | 2 W maximum at full output steady state. | 3 W maximum at full output steady state. |
| Temperature Range | -4°F to 122°F (-20°C to 50°C) operating temperature | |
| Humidity Range | 0 to 95% non-condensing | |
| LED Source Life | 50,000 hours, based on LED manufacturers' test data | |



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